#### Issue No.2

### In this issue

**PROSAWIIII** 

Sawing Times





2. Tough cutting



3. Productivity boost



4. Top Gears



5. Critical valves



6. News and events

### News and application stories from **PROSAWIIIII**



### "Sat-Nav" for Bandsaws

Whilst bandsaws and bandsaw blade technology have made huge advancements over recent years, the single major factor that can influence efficient cutting is the operator's "experience." It is this "experience" that decides what speed the blade runs at as well as the downfeed rate of the machine, all of which means that it is the saw operator and not the management that controls production as well as the overheads such as the life and cost of blades.

However, Danobat have recognised this weakness and have introduced their new iCS control system that allows companies to achieve maximum production rates along with optimum blade life with minimal operator input. By simply selecting the

material grade from the machine's library, the machine will automatically set the correct cutting rates and blade speeds and will continuously readjust these parameters depending on the cross section of the material and the blade condition.

Additionally, The system automatically "runs-in" a new blade, whether it be bimetal or carbide and is an area that tends to be neglected and can result in premature blade failure. The Danobat system not only eliminates guesswork, but even allows the operator to input the specific blade manufacturer in order to ensure that the correct running-in procedure is followed.

The end result ensures the maximum in efficient production with optimum blade life.





# Value for money



Market leader in superalloy supplies declares **Prosaw** Danobat bandsaw "real value for money"

When Sheffield based Special Quality Alloys chose to bring the sawing of large diameter nickel-based superalloys in-house, they naturally turned to Prosaw for advice on processing these extremely tough materials.

The decision to discontinue the use of sub-contractors for this purpose was made all the easier since **Prosaw** had already provided three Danobat bandsaws to Special Quality Alloys. The first of these machines was installed twelve years ago and although all three have been used for sawing slightly smaller diameter billets they have performed remarkably reliably.

The fact that these machines have functioned so consistently over such a long period of time has inevitably resulted in the operators becoming comfortable with the Danobat saws. In addition, the operators did not require any further training as they were of course familiar with the Danobat control systems.

This time however, billets of up to 800mm diameter were required to be cut in an automated continuous process, so a Danobat CP800A Autobandsaw was specified and duly purchased by the company.

Jonathan Gillet, Works Manager of Special Quality Alloys explained the thinking behind the decision: "Bringing the processing of the larger diameter billets in-house has meant a good deal less handling for us, resulting in faster turnaround times, since we are no longer reliant on transport contractors."

"This has benefited the company in the form of lower costs and has brought the whole process entirely under our own control. Even though these products are notoriously difficult to cut, we have complete confidence that when we put a large diameter billet onto the Danobat machine it's going to be cut."

Finally adding: "From our recent experiences we believe that Danobat machines represent real value for money."







With a customer base that includes Airbus, BAE Systems, Boeing, Bombardier, Lockheed Martin, and Sikorsky, it's unsurprising that RTI International Metals Ltd is the leading supplier of specialty metals to the aerospace industry.

Part of a worldwide international group of companies, the UK company employs 50 Employees with a Multi Million Pound turnover.

At their UK facility near Tamworth in Staffordshire, the company has recently taken delivery of a Danobat Vertical Plate Saw, supplied by Kettering based **Prosaw** Limited, to process titanium plate for use in the aerospace industry.

Specially designed to efficiently cut

the more difficult materials such as titanium, the Danobat Vertical Plate Saw is equipped with an automatic gripper system to position the plate to be cut to the desired width, whilst the fully automated CNC control allows the operator to enter a batch to process an entire plate in an automatic cycle.

Commented Senior Manufacturing Engineer Amar Iqbal "We are very pleased with the performance of the Danobat system. It has significantly increased our capacity since we took delivery just over 6 months ago and it completely eliminated our backlog within the first 3 months of use, which has of course had a hugely beneficial impact on our delivery schedules."

As part of the decision process RTI investigated several bandsaw of RTI's products combined with a high level of technical expertise before, during and after the installation.

Mr Igbal continued "Prior to taking delivery of the Danobat machine, we were reliant on a single nonautomatic saw. Now, due to the completely automatic operation of the Danobat machine it is possible for us to run both saws with the same staffing level as before."

"Additionally, our original manual saw utilises a vapour blade lubricating system which can raise Health and Safety issues, in contrast to the Danobat machine which uses a ' flood coolant system' which not only eliminates those issues, but adds significantly to the blade life, helping to reduce the cost of consumables by up to one third."





## Gearing up for success

#### <u>Varatio Ltd</u>

Long established gear manufacturer continues to expand with the aquisition of a new **Prosaw** bandsaw





In business since the 1920's, gear manufacturer Varatio Ltd., based in Slough since the 1950's, continues to expand to cope with the increased demand for their high quality products.

With around 50 employees, the company produce an average of 50,000 gears every month, up to 90% of which are exported. The company have recently purchased a second LX460AE bandsaw from **Prosaw** in order to help manage demand, having originally purchased their first machine two years ago.

The company are capable of producing gears of up to 47 mm in width, although the majority of their production is for 12 mm wide gears.

After the billets have been sawn by the bandsaw, they are turned on CNC machines, hobbed, shaved and finally heat treated in a specialised heat treatment plant to form the finished gear, many of which are used in high quality diesel engines and industrial gearboxes, some of which are used by companies such as Rolls Royce.

The latest bandsaws acquired from **Prosaw** replace older models that had become outdated and lacked some of the technical innovations that can be found on these modern saws.

Explained Production Director Colin Brown "The reliability of these machines is a really important requirement for us, since we operate on a two shift basis and produce such large volumes of gears that any small interruption to production can therefore have a highly detrimental effect on our business. We are therefore delighted with the performance of our new saws. They have proved to be exceptionally reliable."

He added "The new saws also have a number of innovative features that were missing from our previous saws. We now have machines that have a larger capacity than previously, making them much more versatile, whilst the capability to automatically dial in feeds and speeds is a huge saving on set up time."





## Leading the field



Critical oil & gas valve manufacturer enjoys significant savings since installing a **Danobat** vertical bandsaw

As industry leaders in the design and manufacture of critical oil and gas valves for both surface and subsea applications, Newcastle based BEL Valves concentrate their energies on serving evolving markets that demand the very highest quality and reliability.

The company have in the region of 50,000 valves installed across the globe, some of which operate in the most inhospitable environments on the planet, often in ultra-deep waters of up to 10,000 feet and under high pressures as well as extremes of temperature.

With valve sizes ranging up to 48" in diameter and tolerances typically less than one micron, ultra precision machining is of the utmost importance, so when BEL Valves needed to upgrade the cutting

operation during the production of their 24" diameter split gate 4A topside through-conduit valves, they naturally turned to **Prosaw** to provide the solution.

Although the existing process utilised a vertical bandsaw, it was very wasteful of material, typically deviating from it's true path by up to 1/2" on either side of the blade, requiring a considerable amount of post cutting additional machining in order to form a true surface.

**Prosaw's** response was to specify a Danobat VL vertical bandsaw, which has drastically reduced the cutting time for this product from 18 hours to just 6 hours, whilst simultaneously reducing waste material due to the appreciably more accurate cutting path, amounting to cost savings in the region of £1,500 for each valve.

Additionally, further significant cost savings have been achieved by the use of a new type of carbide saw blade, that has a life of more than 50 times that of the previous machine.

Commented Shop Manager, Adam Leggett, "We have been very impressed by this new Danobat machine. It is far more accurate and much faster compared with our previous system, and has created huge cost savings. It has also been responsible for relieving bottlenecks in production, causing work to flow more smoothly through the workshop."

Adding, "**Prosaw** have been with us every step of the way with this project, giving us excellent service and full sales and technical support which has assisted us greatly in bringing this product along."





## Our Growing Service Team

Recognising the importance of good quality and speedy response to customer's requests for after sales support, **Prosaw** has increased its Service Team by 30% over the last 6 months.

Prosaw directly employed the largest team of specialist service engineers even prior to the addition of the new engineers; who come with a wealth of experience in hands-on after sales service and maintenance roles.

Prosaw are centrally placed in the heart of the UK and several Service Engineers operate from this base along with the field based engineers located in the North West, North East, Yorkshire, West Midlands, East Anglia and Southern England.

The expertise of our team covers the professional installation of all Sawing Machinery and Associated Handling Equipment, from a single day to several weeks duration. The fast response to emergency breakdowns along with routine servicing is our weekly routine and is a very cost effective way for customers to protect their investment and reduce breakdowns

Speed of response is the key to any customers request for assistance, but is ineffective without the necessary skills and spares back-up to complete the task in hand with the minimum disruption to the customer. **Prosaw** has all of these resources in abundance.



## Prosaw Certificated Training Courses



## **PROSAWIII**

Telford Way | Kettering | Northants | NN16 8UN
Tel: +44 (0) 1536 410999 | Fax: +44 (0) 1536 410080 | www.prosaw.co.uk | email: sales@prosaw.co.uk